Permit #: 20037 Date Issued: 3-17-88

County: Atchison Date Cancelled:

CONFIDENTIAL UNTIL: Date Plugged:

OGC FORMS	Date Received
1	✓
2	3-17-88
3	2-16-88
3i	4-18-88
4	1-17-88
4i	1-17-88
5	3-22-88
6	
7	
8	
11	3-22-88
12	
Misc. Form #2 /	5-13-93

COMMENTS:

Converted to injection well

	TYPE	ID #	Date Received
Logs	E-log		3-22-88
Samples	chip		
	core		
Analyses	water	9707	3-88
	core		

Additional Submitted Data:
Mechanical Integrity test 5-3-93

Missouri Oil and Gas Council — Form OGC-3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐

for an oil well ☒ or gas well ☐

NAME OF COMPANY OR OPERATOR JAMES K. ANDERSON, INC. DATE 2/8/88

13760 Noel Rd. #325 (Address) DALLAS (City) TEXAS 75240 (State)

DESCRIPTION OF WELL AND LEASE

Name of lease: Schoeler

Well number: 2

Elevation (ground): 884.2

WELL LOCATION (give footage from section lines): 828 ft. from (N) (S) sec. line 1932 ft. from (E) (W) sec. line

WELL LOCATION: Section 15 Township 63N Range 40W

County: Atchison

Nearest distance from proposed location to property or lease line: 500 feet

Distance from proposed location to nearest drilling, completed or applied for well on the same lease: 1382 feet

Proposed depth: 3400

Drilling contractor, name & address: Rains & Williamson Oil Co. 435 Volga Ct. Wichita Kan. 67202

Rotary or Cable Tools: Rotary

Approx. date work will start: 3-1-88

Number of acres in lease: 120 AC.

Number of wells on lease, including this well, completed in or drilling to this reservoir: 2

Number of abandoned wells on lease: -0-

If lease, purchased with one or more wells drilled, from whom purchased: Name N/A Address

No. of Wells: producing ____ injection ____ inactive ____ abandoned ____

Status of Bond: Single Well ☒ Amt. $ 40000.00 Blanket Bond ☐ Amt. ____ ☒ ON FILE ☐ ATTACHED

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed.

Proposed casing program:

amt.	size	wt /ft.	cem.
325'	8 5/8	23.0	175 SX
3400'	4 1/2	10.5	200 SX

Approved casing – To be filled in by State Geologist

amt.	size	wt./ft	cem.
✓	✓	✓	✓
✓	✓	✓	✓

I, the undersigned, state that I am the Geologist of the James K. Anderson, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature M. A. Rains

Permit Number: 20037

Approval Date: 2/16/88 3/17/88

Approved By: James Hall Geologist

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council P.O. Box 250 Rolla, Mo. 65401

One will be returned for driller's signature

☑ Drillers log required

☑ E-logs required if run

☑ Core analysis required if run

RECEIVED FEB 16 1988 MO Oil & Gas Council Economic Geology

☑ Drill stem test info. required if run

☒ Samples required

☐ Samples not required

WATER SAMPLES REQUIRED @ ____

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

3/12/82

Note: Permit approval for drilling only, not injection. Approval or denial for injection determined after Mechanical Integrity Test results reviewed and official notification given.

Missouri Oil and Gas Council — Form OGC-3I

INJECTION WELL PERMIT APPLICATION: to drill, deepen, plug back, or convert an existing well

APPLICATION TO DRILL — DEEPEN ☐ — PLUG BACK ☐ — CONVERSION ☒

NAME OF COMPANY OR OPERATOR James K. Anderson, Inc. DATE 3/22/88

13760 Noel Rd. Suite 325 (Address) Dallas (City) Texas 75240 (State)

DESCRIPTION OF WELL AND LEASE

Name of lease	Well number	Elevation (ground)
Schoeler	2	884.2

WELL LOCATION (give footage from section lines): 828 ft. from (N) (S) sec line; 1932 ft. from (E) (W) sec line

WELL LOCATION: Section 15 Township 63N Range 40W — COUNTY: Atchison

Nearest distance from proposed location to property or lease line: 500 feet

Distance from proposed location to nearest drilling, completed or applied – for well on the same lease: 1382 feet

Proposed depth	Rotary or Cable tools	Drilling Contractor, name and address	Approx. date work will start
2407	Rotary	Kaiser & Williamson O.L.Co. 435 Paige Ct. Wichita, Kan 67202	Spudded 3-2-88

Number of acres in lease: 240

Number of wells on lease, including this well, completed in or drilling to this reservoir: 2

Number of abandoned wells on lease: -0-

If lease purchased with one or more wells drilled, from whom purchased?
Name N/A
Address

No of Wells: producing ____ injection ____ inactive ____ abandoned ____

Status of Bond: Single Well ☒ Amt. $40000 Blanket Bond ☐ Amt. ____ — ☒ ON FILE ☐ ATTACHED

Outline Proposed Stimulation Program

Proposed casing program

amt.	size	wt/ft	cem.
349'	8 5/8	24#	275 SX
2334'	4 1/2	10.5#	160 SX

Approved casing – To be filled in by State Geologist

amt.	size	wt/ft	cem.

RECEIVED
APR 18 1988
MO Oil & Gas Council
Economic Geology

I, the undersigned, state that I am the Geologist of the James K. Anderson, Inc. (company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature Mark A. Shaw

Permit Number #20037

Approved Date 6/1/88

Approved by Jana Holly Williamson KD

☐ SAMPLES REQUIRED ☑ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @ ____

Note: This Permit not transferable to any other person or to any other location

Remit two copies to: Missouri Oil and Gas Council, P.O. Box 250, Rolla, MO 65401

One will be returned for driller's signature

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

8/1/84

I _____ of the _____

Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized Council representative.

Driller's signature _____

Date _____

CONFIDENTIAL

Proposed Operations Data

Proposed average daily injection, pressure Vacuum psig, rate 7.3 bpd/(gpm), volume 250 (bbl)/gal

Approved average daily injection, (to be filled in by State Geologist). pressure 10.0 psig, rate 7.3 (120) bpd/(gpm), volume 250 (bbl)/gal

Proposed maximum daily injection, pressure 10.5 psig, rate 29.2 bpd/(gpm), volume 1000 (bbl)/gal

Approved maximum daily injection, (to be filled in by State Geologist). pressure 10.5 psig, rate 29.2 bpd/(gpm), volume 1000 (bbl)/gal

Estimated fracture pressure/gradient of injection zone 1040 psi/foot

Describe the source of the injection fluid Viola dolomite formation water (SEE ANALYSIS)

Submit an appropriate analysis of the injection fluid. (Submit on separate sheet).

Describe the compatibility of the proposed injected fluid with that of the receiving formations, including total dissolved solids comparisons.

Based on performed lab analysis of both the Viola & Hunton waters it would appear that these fluids would be compatible. We are not surprised since we were injecting this Viola water over in Kansas into a Hunton disposal well with no problem.

Give an accurate description of the injection zone including lithologic descriptions, geologic name, thickness, depth, porosity, and permeability.

The injection zone is in the Hunton, approximately 182' into the Hunton section. It is a highly porus and permeable zone since we lost circulation in it. It appears we cut 3' of this section before we lost circulation, putting the top of the zone at 2404' with total depth of 2407'

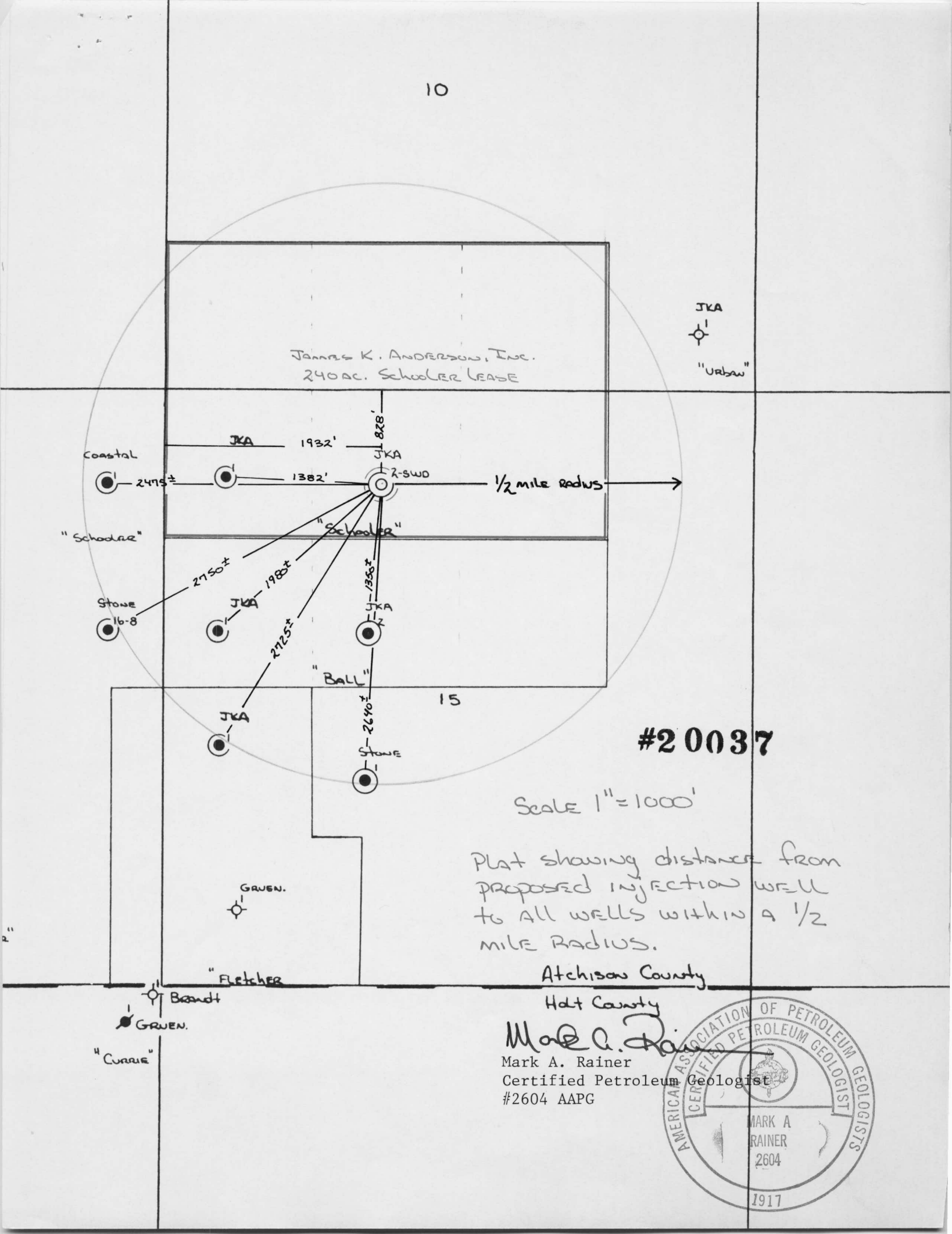
Give an accurate description of the confining zones including lithologic description, geologic name, thickness, depth, porosity, and permeability.

The confining zones above and probably (most likely) below our injection zone is also Hunton dolomite. It is a very fine grain dense dolomite not capable of producing any fluids

*Submit all available logging and testing data on the well. *(This information is already in your files)

Give a detailed description of any well needing corrective action which penetrates the injection zone in the area of review (½ mile radius around well). Include the reason for and proposed corrective action.

NONE



Mark A. Rainer
Certified Petroleum Geologist
#2604 AAPG

AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS
CERTIFIED PETROLEUM GEOLOGIST
MARK A RAINER
2604
1917

4-27-83

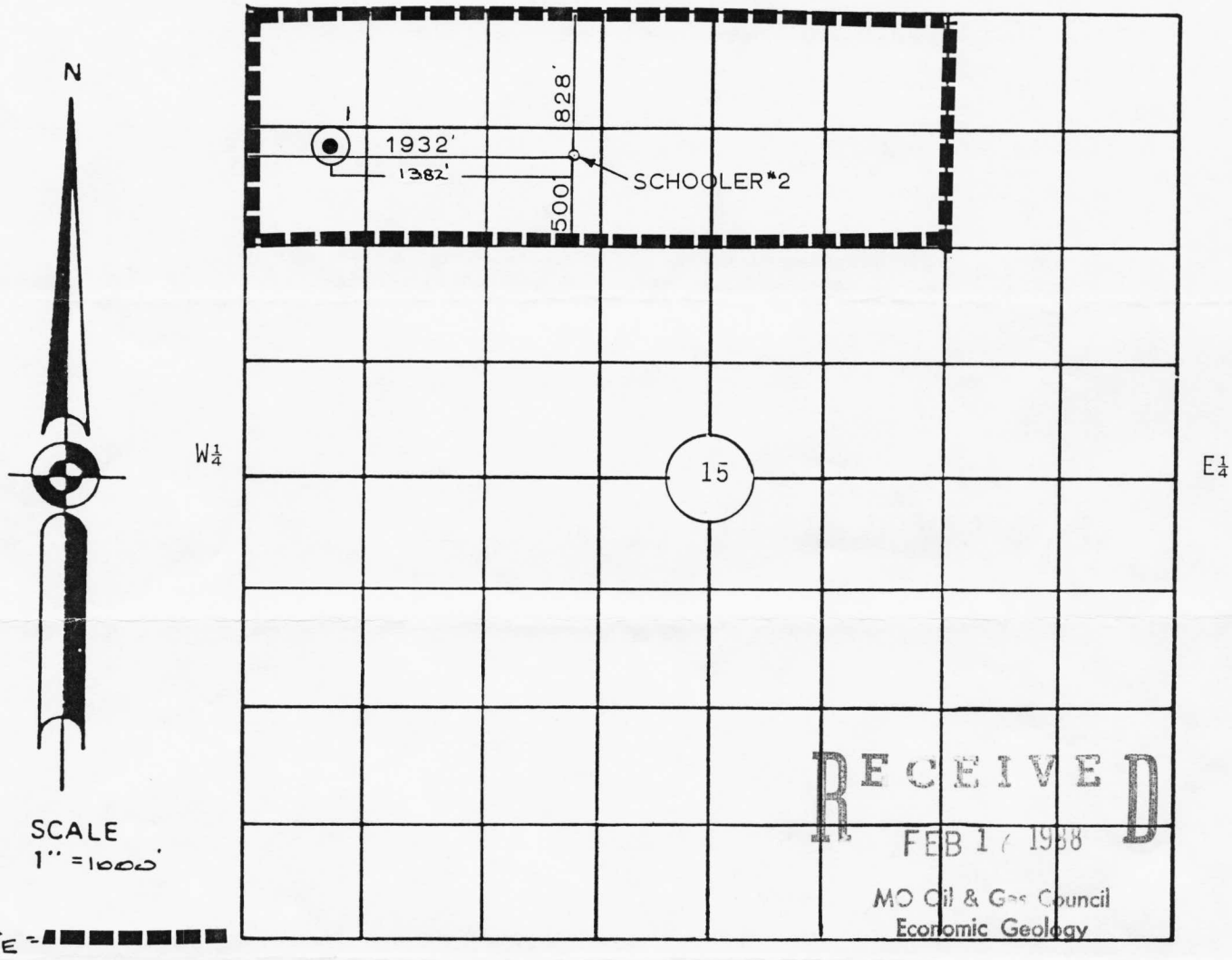
Missouri Oil and Gas Council
WELL LOCATION PLAT

Form OGC-4

Owner: James K. Anderson, Inc. Stone Tower, Suite 325, Dallas Texas 75240

Lease Name: Schooler #2 County: Atchison

828 feet from N (N)-(S) section line and 1932 feet from W (E)-(W) section line of Sec. 15 ; Twp. 63 N., Range 40



REMARKS: All elevations are in reference to USGS Vertical datum.
Ground elevation at proposed well is 884.2.

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50 2 030 for survey requirements. Lease lines must be marked.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250, Rolla, MO 65401
One will be returned.

This is to Certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

STATE OF MISSOURI
JOHN R. TEALE
NUMBER LS-1724
REGISTERED LAND SURVEYOR
(SEAL)

Registered Land Surveyor
John Teale

1724
Number

RECEIVED
SEP 18 2000
MO Oil & Gas Council

4-27-83

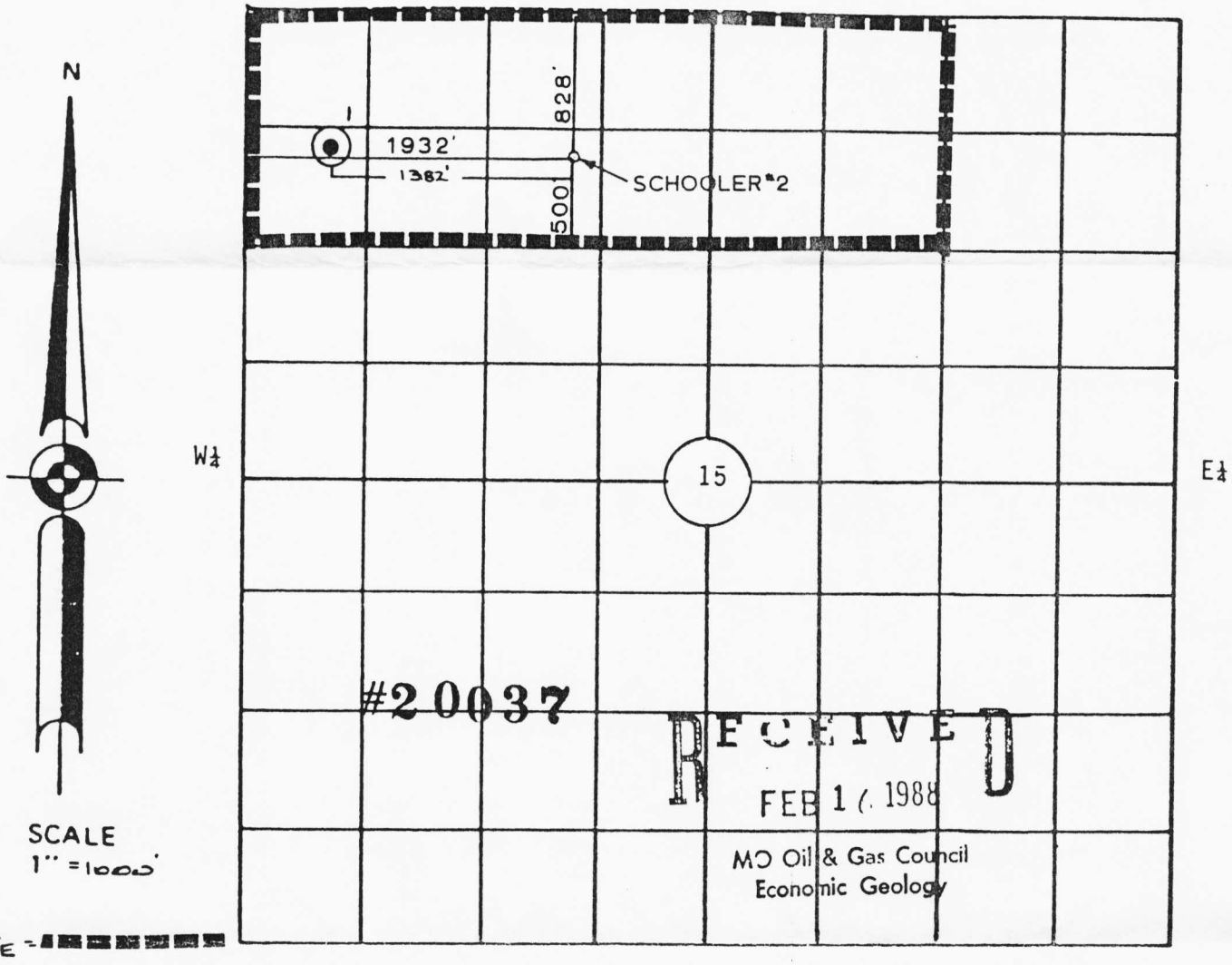
Missouri Oil and Gas Council
WELL LOCATION PLAT

Form OGC-4

Owner: James K. Anderson, Inc. Stone Tower, Suite 325, Dallas Texas 75240

Lease Name. Schooler #2 County: Atchison

828 feet from N (N)-(S) section line and 1932 feet from W (E)-(W) section line of Sec. 15 ; Twp. 63 N., Range 40



#20037

RECEIVED
FEB 17 1988
MO Oil & Gas Council
Economic Geology

REMARKS: All elevations are in reference to USGS Vertical datum.
Ground elevation at proposed well is 884.2.

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50 2 030 for survey requirements. Lease lines must be marked.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250, Rolla, MO 65401
One will be returned.

This is to Certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

STATE OF MISSOURI
JOHN R. TEALE (SEAL)
NUMBER LS-1724
REGISTERED LAND SURVEYOR

Registered Land Surveyor
John Teale

3/12/82

Missouri Oil and Gas Council

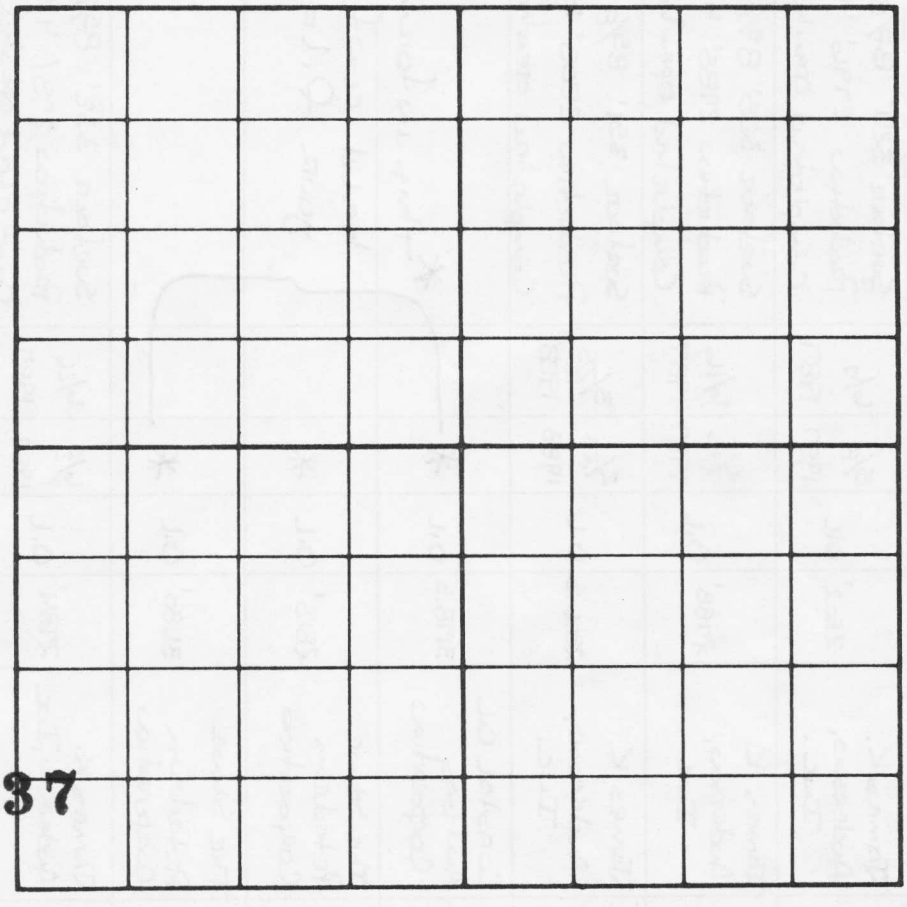
Form OGC-4-I

INJECTION WELL LOCATION PLAT

Owner: JAMES K. ANDERSON, INC. 13760 NOEL Rd. #325 DALLAS, TEXAS 75240

Lease Name: SCHOOLER WELL #2 County: ATCHISON

828 feet from (N) (S) section line and 1937 feet from (E) (W) section line of Sec. 15, Twp. 63N., Range 40W



SCALE 1" = #20037

REMARKS: SEE attached plats, ① ORIGINAL SURVEYOR'S plat and ② Plat showing distances from proposed injection well to all wells within a 1/2 mile Radius.

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50-2.030 for survey requirements. Lease lines must be marked.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250, Rolla, MO 65401

One will be returned.

This is to Certify that I have executed a survey to accurately locate injection and area of review wells (wells within a ½ mile radius of the injection well that penetrate the injection interval) in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

(SEAL)

MARK A RAINER 2604

Number

Mark A. Rainer

Certified Petroleum Geologist

RECEIVED
SEP 18 2000
MO Oil & Gas Council

Form OGC-5

MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

☐ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☒ INJECTION ☐ SAME RESERVOIR ☐ DIFFERENT RESERVOIR ☐ OIL ☐ GAS ☐ DRY

OWNER: H & R Well Services Inc.	ADDRESS: 17509 Rd. 14, Ft. Morgan, CO 80701
LEASE NAME: Schooler	WELL NUMBER: #2
LOCATION: 828' FNL 1932' FWL	SEC. TWP. AND RANGE OR BLOCK AND SURVEY: 15-63N-40W
COUNTY: Atchison	PERMIT NUMBER (OGC-3 OR OGC-3I): 20037

DATE SPUDDED	DATE TOTAL DEPTH REACHED	DATE COMPLETED READY TO PRODUCE OR INJECT	ELEVATION (DF, RKR, RT, OR Gr.) FEET	ELEVATION OF CASING HD. FLANGE FEET
3/2/1988	3/20/88	3/26/88	884'	884

TOTAL DEPTH	PLUG BACK TOTAL DEPTH
2,390' 2407	NA - drilled out shoe

PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION	ROTARY TOOLS USED (INTERVAL) / DRILLING FLUID USED	CABLE TOOLS USED (INTERVAL)
Injection - Hunton	TO /	

WAS THIS WELL DIRECTIONALLY DRILLED?	WAS DIRECTIONAL SURVEY MADE?	WAS COPY OF DIRECTIONAL SURVEY FILED?	DATE FILED
No		NA	

TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST)	DATE FILED
CBL	

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
Surface		8-5/8"	24#	349'	275	-----
Long string		4-1/2"	10.5#	2,334'	160	-----

TUBING RECORD / LINER RECORD

TUBING SIZE	TUBING DEPTH SET	TUBING PACKER SET AT	LINER SIZE	LINER TOP	LINER BOTTOM	LINER SACKS CEMENT	LINER SCREEN
2-3/8 IN.	2,250 FEET	2,250 FEET	INCH	FEET	FEET		FEET

PERFORATION RECORD / ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FEET	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
Open hole				

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION	PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING — IF PUMPING, SHOW SIZE AND TYPE OF PUMP.)
6/1988	

DATE OF TEST	HOURS TESTED	CHOKE SIZE	OIL PRODUCED DURING TEST bbls.	GAS PRODUCED DURING TEST MCF	WATER PRODUCED DURING TEST bbls.	OIL GRAVITY API (CORR.)

TUBING PRESSURE	CASING PRESSURE	CAL'TED RATE OF PRODUCTION PER 24 HOURS	OIL bbls.	GAS MCF	WATER bbls.	GAS OIL RATIO

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)

METHOD OF DISPOSAL OF MUD PIT CONTENTS

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE _____ OF THE _____ COMPANY, AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

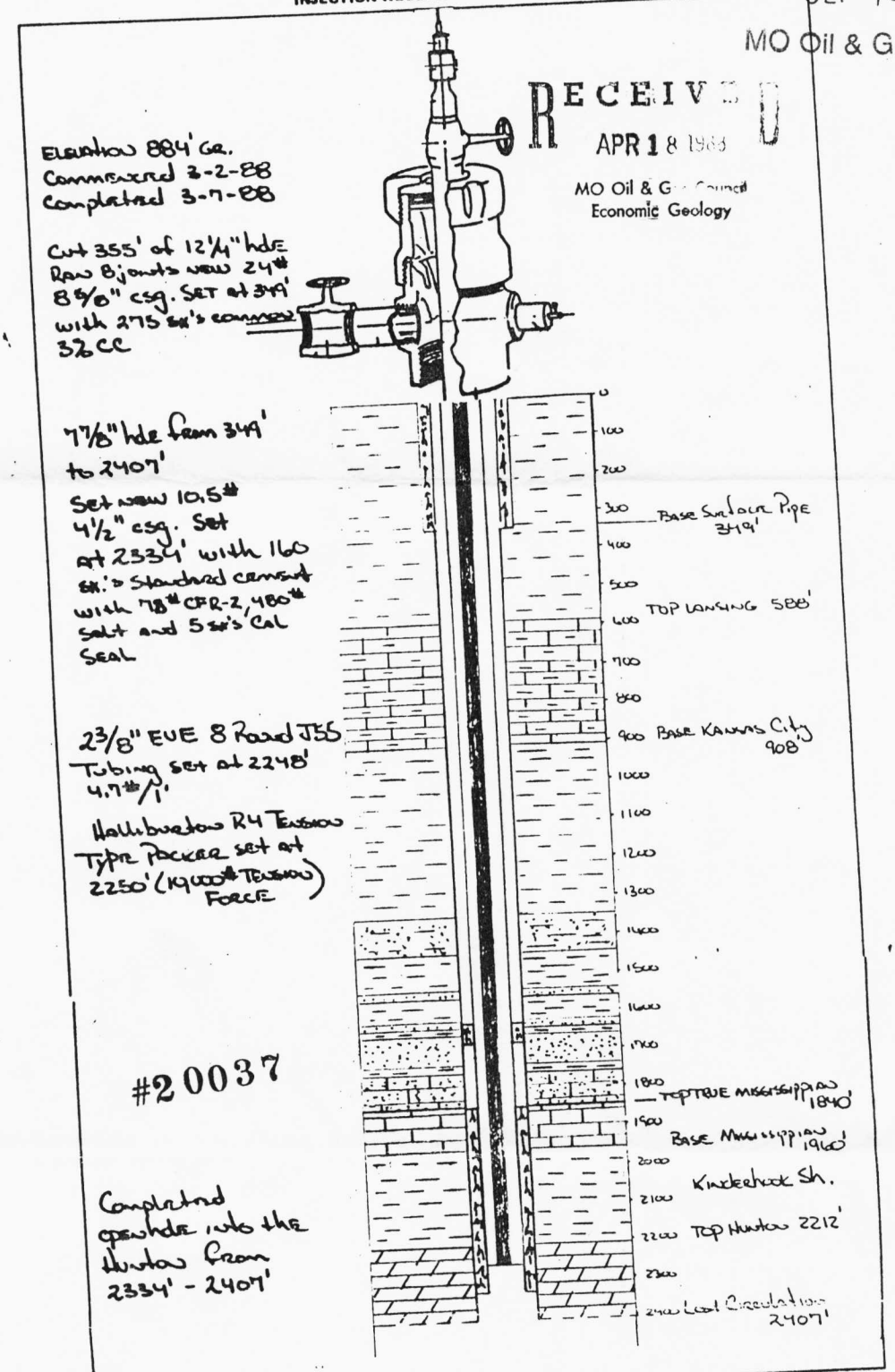
DATE	SIGNATURE
9/12/00	Dave Rush

County Atchison Permit # _____ Operator James K. Anderson, Inc. Well # Schlee No. 2

Form OGC-11

Missouri Oil and Gas Council

INJECTION WELL SCHEMATIC



Instructions

On the above space draw a neat accurate schematic diagram of the applicant injection well including the following: configuration of well head, total depth or plug back total depth, depth of all injection or disposal intervals, and their formation names, lithology of all formations penetrated, depths of the tops and bottoms of all casing and tubing, size and grade of all casing and tubing, and the type and depth of packer, depth, location, and type of all cement, depth of all perforations and squeeze jobs, and geologic name and depth to bottom of all underground sources of drinking water which may be affected by the injection. Use back if additional space is needed, or attach sheet.

3/12/82

MECHANICAL INTEGRITY TEST REPORT

MAY 13 1993

MO Oil & Gas Council

Test Date: April 30, 1993

Operator: James K. Anderson, Inc.
Contact Person: Robert Kelley
Address: P.O. Box 536 Ballinger, Texas 76821
Phone: 915-365-5693

Lease Schooler Well # 2
County Atchison Permit # 20037

TEST INFORMATION:

Type MIT: Pressure X Radioactive Tracer Survey ___ Temperature Survey ___

	Run #1	Run #2	Run #3
Start Time:	2:55	3:15	
End Time:	3:15	3:27	
Length of Test: (Start Time minus End Time)	0:20	0:12	
Initial Pressure (PSI):	480	485	
Ending Pressure (PSI):	485	485	
Pressure Change: (Initial Pressure minus Ending Pressure)	Increase 5 psi	0	

Fluid used for test (water, nitrogen, CO2, ect.): Water

Comments about test: 1) Tested 4½ casing/ 2 3/8" annullus
2) 2 3/8" tubing on vacuum
3) Run #1 had slight psi increase then stabilized

The bottom of the tested zone is shut in with Halliburton R-4 Packer at a depth of 2248 ft. In signing the form below, it is certified that the above indicated well was tested for mechanical integrity on the date shown at the top of this page.

Signed: Robert Kelley Robert Kelley Production Engineer
Operator Contact Person or Approved Agent 5/11/93 Title

DO NOT WRITE BELOW THIS LINE

Results were: Satisfactory ✓ EK Not Satisfactory ___
State Agent: _____ Witnessed: Yes ___ No ✓
REMARKS: _____
Computer Update ___ FILE WITH PERMIT!

OGC Misc Form 1

MECHANICAL INTEGRITY TEST REPORT

Test Date: August 9, 2000

Operator: H+R Well Service
Contact Person: Dave Messmer
Address: 17509 Road 14
Phone: Ft. Morgan Colo, 80701

Lease Schooler Well # 2
County Atchison Permit # 20037

TEST INFORMATION:

Type MIT: Pressure X Radioactive Tracer Survey___ Temperature Survey___

	Run #1	Run #2	Run #3
Start Time:	1:06 pm		
End Time:	1:36 pm		
Length of Test: (Start Time minus End Time)	30 min		
Initial Pressure (PSI):	395		
Ending Pressure (PSI):	395		
Pressure Change: (Initial Pressure minus Ending Pressure)	0#		

Fluid used for test (water, nitrogen, CO2, ect.): Water

Comments about test:

The bottom of the tested zone is shut in with Halliburton R-4 Packer at a depth of 2248 ft. In signing the form below, it is certified that the above indicated well was tested for mechanical integrity on the date shown at the top of this page.

Signed: David L Messmer Owner
Operator Contact Person or Approved Agent — Title

DO NOT WRITE BELOW THIS LINE

Results were: Satisfactory X Not Satisfactory___
State Agent: Theodore R Hunt Witnessed: Yes X No___
REMARKS:
Computer Update SAS. FILE WITH PERMIT!

OGC Misc Form 1

James K. Anderson, Inc.
STONE TOWER - SUITE 325 13760 NOEL ROAD DALLAS, TEXAS 75240 214/387-8200
PETROLEUM EXPLORATION, PRODUCTION, OPERATION, AND DEVELOPMENT

April 14, 1988

Dear Ken,

Attached please find two copies of our application to inject water in the Hunton at the Runamuck Field in Atchison Co., Missouri. I hope all is in order and if you should need anything please give myself or Jimmy Anderson a call.

Sincerely,

Mark A. Rainer
Geologist
James K. Anderson, Inc.

#20037

#20037

PETROLITE

Petrolite Corporation
369 Marshall Avenue • St. Louis, Missouri 63119
314 961-3500 • Telex: 44-2417

Schooley well file

WATER ANALYSIS REPORT

Company: JAMES K. ANDERSON

Sampling Date: 06/24/87
Analysis Date: 07/02/87
Sample ID: F28498

#20037

Sample Source
Lease: SCHOOLEY
Well: #1
Sample Pt: BLEEDER

Submitted by: NATION, P.W.
Sampled by:
Chem. Treatment:
Sample Condition: V SLT OG/CLR

ANALYTICAL RESULTS

(Vida Water)

pH at the time of sampling: 6.50 > GTL 7.4
pH at the time of analysis: 8.00
Density: 1.006
Hydrogen Sulfide (H2S): NEG
TDS: Calculated 6445.5 mg/L

CONSTITUENT		mg/L	meq/L	method	comments
ANIONS					
*Bicarbonate	HCO3-	366.0	6.00	FLD	
Boron	B(OH)4-	57.0	.72	ICP	
*Carbonate	CO3--	.0	.00	N.A.	
*Chloride	Cl-	2090.0	58.95	FIA	
Phosphate	PO4---	0.0	0.00	ICP	DL= 2.020
*Sulfate	SO4--	1670.0	34.77	FIA	
	SUM OF ANIONS=		100.44		
CATIONS					
Aluminum	Al+++	0.0	0.00	ICP	DL=10.100
*Barium	Ba++	0.0	0.00	ICP	DL= 2.020
*Calcium	Ca++	439.0	21.91	ICP	
Chromium	Cr+++	0.0	0.00	ICP	DL=10.100
Copper	Cu++	4.6	.14	ICP	
*Iron	Fe++	20.0	.72	FLD	
Lead	Pb++	0.0	0.00	ICP	DL=10.100
Lithium	Li+	0.0	0.00	N.A.	
*Magnesium	Mg++	95.3	7.84	ICP	
Manganese	Mn++	0.0	0.00	ICP	DL= 2.020
Nickel	Ni++	0.0	0.00	ICP	DL= 2.020
Potassium	K+	294.0	7.52	ICP	
Silica	SiO2	28.7	0.00	ICP	
*Sodium	Na+	1381.0	60.07	ICP	
*Strontium	Sr++	0.0	0.00	ICP	DL= 2.020
Vanadium	V++	0.0	0.00	N.A.	
	SUM OF CATIONS=		98.20		

Ratio of ANIONS:CATIONS 1.02

GTL 2049

General Testing Laboratories, Inc.

Engineering — Chemical Consultants

1517 WALNUT STREET / KANSAS CITY, MISSOURI 64108 / 816-471-1205

GENERAL TESTING LABORATORIES, INC. 50 Years of Service 1931 1981

Date April 11 198 8 Number 72475

Sample of Water Sample Hunton wtr.

Marked Schooler # 2 Disposal Well, Atchison County, MO Received in lab 3-28-88

Client James K. Anderson, Inc., ATTN: Mark A. Rainer

pH	7.4
Oil & Grease	19.5 mg./liter
Chloride	1,170 mg./liter
Total Suspended Solids	655 mg./liter
Total Settable Solids	12.7 mg./liter
Total Dissolved Solids	1,667 mg./liter

#20037

GENERAL TESTING LABORATORIES, INC.

By Dale Hansen

(1)cl

General Testing Laboratories, Inc.

Engineering — Chemical Consultants

1517 WALNUT STREET / KANSAS CITY, MISSOURI 64108 / 816-471-1205

GENERAL TESTING LABORATORIES, INC. 50 Years of Service 1931 1981

Date July 27 198 7 Number 68185

Sample of Water

Marked From Oil Well Schaefer No. 1 (Vicla Water)

Client James K. Anderson, Attn: Mark Rainer

pH	7.4
Oil & Grease	6.6 mg/ltier
Chlorides	2,049 mg/liter
Suspended Solids	14 mg/liter
Settleable Solids	less than 0.05 ml/liter

#20037

GENERAL TESTING LABORATORIES, INC.

By Laurence Poirier

(1)ks

JOHN ASHCROFT
Governor

FREDERICK A. BRUNNER
Director

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation, and Historic Preservation

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGY & LAND SURVEY
P.O. Box 250, 111 Fairgrounds Road
Rolla, MO 65401
314-364-1752

REPORT OF CHEMICAL ANALYSIS OF WATER SAMPLE

COUNTY:..... Atchinson
OWNER:..... J. K. Anderson - Ball Lease
LOCATION:..... SEC 15-T63N-R40W
COLLECTOR:..... Deason, K.
DATE COLLECTED: 3/88

ADDRESS:.....

ANALYSIS NUMBER:9707
ANALYST:.....G. M. Lovell
DATE RECEIVED:..03/14/88
DATE ANALYZED:..03/14/88

TOTAL DEPTH:... Produced Water
CASING DEPTH:..

NOTES:.....

CONSTITUENTS	PARTS PER MILLION (PPM)
ALKALINITY(CaCO3).....	
PHENOLPTHALEIN.....	
METHYL ORANGE.....	
CARBONATE (CO3).....	
BICARBONATE (HCO3).....	
pH.....	
NITRATE-NITROGEN (NO3-N).....	
CALCIUM (Ca).....	
MAGNESIUM (Mg).....	
SODIUM (Na).....	
POTASSIUM (K).....	
IRON (Fe).....	
MANGANESE (Mn).....	
CHLORIDE (Cl).....	
SULFATE (SO4).....	
TOTAL DISSOLVED SOLIDS (TDS).....	7146
TOTAL HARDNESS.....	
CARBONATE HARDNESS.....	
NON-CARBONATE HARDNESS.....	

STATE OF MISSOURI
Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
P.O. Box 250 111 Fairgrounds Rd. Rolla, MO 65402-0250
(573) 368-2100
FAX (573) 368-2111

August 22, 2000

H & R Well Services
17509 Rd 14
Fort Morgan, CO 80701
Mr. Dave Rebol

RE: Well Completion Form, Schooler #2 Well, Atchison Co., Missouri

Dear Mr. Rebol,

In reviewing the file for the Schooler #2 well, there appears to be no Well Completion Form for the well. Please fill out the enclosed Well Completion Form and return it back to my office.

Thank you.

Sincerely,

DIVISION OF GEOLOGY AND LAND SURVEY

Sherri Stoner

Sherri Stoner
Geologist
Geological Survey Program
Wellhead Protection Section
573/368-2195
nrstons@mail.dnr.state.mo.us

Encl.

H&R Well Services, Inc.
17509 Rd 14, Ft. Morgan, Colo. 80701
(970)-867-9007 and (970)-867-8374 (Fax)

September 12,2000

Ms. Sherri Stoner
Geologist
State of Missouri

Re: Schooler # 2

Ms. Stoner,

Attached is the from 2 you requested. I copied some additional information from the well file. I think everything is accurate to the best of our knowledge.

If you need anything else please call.

Sincerely,

Dave Rebol

Dave Rebol

WENDELL B. COOK, P.E.

Petroleum and Natural Gas Consultant
214/368-7291, Res. 214/348-7179
Meadows Building, Dallas, Texas 75206

March 28, 1988

JAMES K. ANDERSON, INC.
Schooler #2
Runamuck Field
Atchison County, Missouri

3/21/88

Great Guns Logging Company RU to run CBL in 4½" csg. No open hole logs available (?). Tagged bottom at 2277' W/ GR-CBL log cmt. at 1630' - 1680'; TOC at 1850' logged W/CBL to 1300' W/G/R. Rigged down pulling unit from the Schooler #2 and moved to the Ball #2 well. RU portable mast, ran G/R-Neutron-collars from PBTD of 2277' to surface. RD Great Guns at 3:30 p.m.

3/24/88

RU Pulling unit, hauled in 145 bbls. formation water. Pressure tested casing to 1000 psig for 30 mins., pressure held ok (took less than 1 bbl. to fill csg.) WIH with 3 7/8" bit, sub, 3 - DC's and 2 3/8" tbg. at 1:30 p.m. (Strong NE wind) Tagged cement at 2283'; RU Rot. head, drlg. on rubber plug and float collar at 2290' fr. 4:00 to 4:30 p.m.; drilled cement out of shoe jt. to a depth of 2315'. Shut down.

3/25/88

On loc. at 7:00 a.m., unloaded 125 bbls. formation water into pits - continued DO of shoe jt. at 8:15 a.m. - on shoe at 9:15 a.m. - torquing up. Drilled thru shoe - lowered tubing (no loss of circ.). Shoe at 2328' per tbg. tally. Next jt. lowered and circ. - no cmt. to 2372'; Drilled on cement, lost circ. - pulled up and circ. out DM, LCM, cement - washed to a depth of 2390', pumped into formation with 375 psig at 2.5 BPM. Retrieved tbg. Made up Halliburton R-4 tension packer and SN, ran 71 jts. tbg. set packer at 2248' with 15" vertical pull. Pressured backside to 400 psig, held ok. Pumped into tbg. with 225 psig. at approx. 3 BPM FL at 400' from surface - tbg. on vac. after pump shut down. RU swab at 3:30 p.m. - swabbing Hunton formation FL 400' - tbg. rough and rusty - swbg. fr. SN at 2248' recovering approx. 4-5 bbls. of load and formation water per run. Made 14 runs in 2½ hours making approx. 60-70 bbls. water. Last 5 runs W/swab, water turned dark w/rainbow of oil, sli. salt taste and somewhat of a pungent odor. Took sample on last run at 6:00 p.m. Released pulling unit. Well Shut in.

3/26/88

Left Mound City at 8:30 a.m. Delivered the Schooler #2 water sample to General Testing Laboratories, Inc. at 1517 Walnut Street in Kansas City, MO 64108. I left the sample with Mr. Lawrence Poisner, P.E. He asked that someone from Dallas call the lab Monday, March 28 for further instructions. The telephone number is 816/471-1205.

WBCook

AFFIDAVIT OF PUBLICATION

State of Missouri } ss.
County of Atchison }

William W. Farmer

being duly sworn according to law, says that he is the publisher (or editor) of The Atchison County Mail, a weekly newspaper located, printed and published in the City of Rock Port, in Atchison County, Missouri; that said newspaper for a period of three years and more prior to the date of the first insertion of the publication herein referred to, was, ever since said date has been, and now is published regularly and consecutively; that during all said time said newspaper has been, and now is, a newspaper of general circulation in said County; that during all said time said newspaper has been, and now is admitted to the postoffice as second class matter in said City of Rock Port, the city of publication; that during all said time said newspaper has had, and now has, a list of bona fide subscribers voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time; that said newspaper, during all said time, has complied with and now complies with the provisions of an Act of the 62nd General Assembly of the State of Missouri, entitled "Public Advertisements," approved Aug. 2nd, 1943, and known as Section 14968, and that said notice was in all respects published in compliance with the provisions of said Section; and that the said notice hereto attached

was published in said newspaper once a week for one consecutive weeks as follows:

In Vol. 111 No. 13 Dated Mar. 31 19 88

In Vol. _____ No. _____ Dated _____ 19 _____

In Vol. _____ No. _____ Dated _____ 19 _____

In Vol. _____ No. _____ Dated _____ 19 _____

In Vol. _____ No. _____ Dated _____ 19 _____

William W. Farmer
Publisher (or Editor)

Subscribed and sworn to before me this 7th day of

April 19 88

Dianna Hawkins

(SEAL) My commission expires April 17, 1991

Publishers Fee $_____ Notary Fee $_____

5C-12395

Dianna Hawkins
My Commission Expires April 17, 1991

NOTICE OF SALTWATER INJECTION WELL

Operator: James K. Anderson, Inc., 13760 Noel Road, Suite 325, Dallas, Texas 75240; Schooler #2 Well: Located in the NE/4 NW/4 Sec. 15, T-63N, R-40W, Atchison County, Missouri. Pipe set to a depth of 2350 feet below the surface.

Written comments or requests for additional information regarding such well should be directed within 15 days of this notice to: Mr. Ken Deason, Missouri Oil and Gas Council, P.O. Box 250, Rolla, Missouri 65401. 1p

#20037

#20037

NEWS

JOHN ASHCROFT
Governor

FREDERICK A. BRUNNER
Director

MISSOURI DEPARTMENT OF NATURAL RESOURCES

PUBLIC INFORMATION P.O. Box 176, Jefferson City, MO 65102 314-751-3443

Vol. XV No. 282 Writer: Diane Vasey

(For immediate release) #20037

JEFFERSON CITY, MO., APRIL 27, 1988--The Missouri Department of Natural Resources will hold a public hearing May 18 to receive public comment on a proposal to exempt an aquifer near St. Joseph for saltwater disposal. The exemption would allow potentially drinkable water in the aquifer to receive saltwater injection created from oil and gas production.

The hearing will be at 2 p.m. in the meeting room at the Department of Natural Resources' Division of Geology and Land Survey, 111 Fairgrounds Road, Rolla.

James K. Anderson, Inc., has requested this exemption in the Hunton Formation, Devonian System at their Schooler Lease, located in the NE/4 NW/4 Sec. 15, T. 63N., R. 40W.

Anyone who wishes to speak at the hearing may do so upon written request; write to Ken Deason, UIC Coordinator, Department of Natural Resources, Division of Geology and Land Survey, P.O. Box 250, Rolla, MO, 65401. Deadline for receiving written requests is May 11. For more information, call Deason at 314-364-1752.

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WENDELL B. COOK, P.E.

Petroleum and Natural Gas Consultant
214/368-7291, Res. 214/348-7179
Meadows Building, Dallas, Texas 75206

March 28, 1988

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Schooler #2
Runamuck Field
Atchison County, Missouri

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#20037

WBCook

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FAX (573) 368-2111

NOTICE OF VIOLATION

certified mail # Z 184 373 324

December 11, 1998

James K. Anderson, Inc.
14677 Midway Rd.
Suite 115
Dallas, TX 75244

RE: Required MIT for injector well API # 20037 - Atchison Co. Missouri

Dear Mr. Anderson;

The required five year MIT for the above referenced well is eight months overdue. Please contact my office next spring, so that I, or a representative of the state, may witness the MIT.

I will be awaiting your response.

Sincerely,

Sherri Stoner

Sherri Stoner, Geologist
Oil and Gas Unit
(573) 368-2195

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

August 10, 2000

To: Evan Kifer, MDNR/DGLS

From: Ted Fritz, EPA Region 7

Subject: Mechanical Integrity Test on Schooler Lease and Check of Tarkio and Glover Farms Leases

On August 9, 2000 I witnessed a Mechanical Integrity Test on the Schooler #2 injection well in NE1/4, NW1/4, Section 15, T 63 N, R 40 W, Atchison County, Missouri. The report is enclosed and the well passed the test.

I also checked two other leases in Atchison County and found the following:

1. Tarkio Lease, W1/2, Sec. 32, T 65 N, R 39 W - At least two wells were pumping and a pulling unit was over another producing well. Mr. Messmer of H&R Well Service stated the injection well is operating and I did not see any problems on the lease.

2. Glover Farms Lease, SW1/4, SE1/4, Sec. 32, T 65 N, R 39 W - The pit at the tank battery is still mostly full of fluids with a thin coating of oil over most of the surface. Mr. Messmer said the operators of the lease had asked him if they could have the fluids hauled to the Tarkio lease injection well, but he declined the request since he does not have a truck to haul the fluids with.

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(573) 368-2100
FAX (573) 368-2111

August 21, 2000

H & R Well Services, Inc.
17509 Road 14
Ft. Morgan, CO 80701
Attn: Mr. Dave Rebol

RE: Injection Well, Schooler #2, Atchison Co. Missouri

Dear Mr. Rebol,

Enclosed is your copy of the MIT that Dave Messmer conducted on August 9, 2000 on the above referenced well. Mr. Ted Fritz, EPA Region VII, witnessed and approved the MIT.

Sincerely,

DIVISION OF GEOLOGY AND LAND SURVEY

Sherri Stoner

Sherri Stoner
Geologist
Geological Survey Program
Wellhead Protection Section
573/368-2195
nrstons@mail.dnr.state.mo.us

Encl.